

EPA LABORATORIES IMPLEMENT EMS PROGRAM

First adopted by manufacturing industries, environmental management systems (EMSs) are now widely used throughout the public and private sectors. Simply stated, an EMS is a continual cycle of planning, implementing, reviewing, and improving the processes and actions that organizations undertake to meet business and environmental goals. According to an April 2000 White House Executive Order, *Greening the Government Through Leadership in Environmental Management* (www.epa.gov/ems/federal/eo13148.htm), each U.S. federal agency is required to ensure that all necessary actions are taken to integrate environmental accountability into the agency's day-to-day decision-making and long-term planning processes. Since 2002, EPA has been involved in a wide range of activities designed to facilitate EMS adoption across the agency, including activities based on the International Organization for Standardization (ISO) 14001, an internationally accepted set of specifications for EMSs and other models. During 2003 and 2004, EPA established staff-led teams to oversee the facility-level implementation process and several major components of the agency's EMS program were piloted. The agency expects to be able to certify its EMS program in late 2005.

EPA's EMS program is built on the well-known "Plan, Do, Check, Act" model. This model leads to continual improvement based on identifying environmental factors and establishing goals, implementing training programs and operational controls, monitoring processes and performing corrective action, and continuously reviewing progress and making needed changes to the EMS. EPA's ultimate goal is to establish an EMS that goes beyond compliance to helping to run operations more effectively, be more efficient with resource use, and improve processes on a continual basis. To achieve this, the agency plans to

- meet or exceed applicable environmental requirements;
- strive to continuously improve

environmental performance in terms of both regulated and unregulated environmental impacts (e.g., energy and water conservation);

- employ source reduction and other pollution prevention approaches;
- require consideration of environmental factors when making purchasing and operating decisions;
- establish, track, and review specific environmental performance goals; and
- continue sharing information on environmental performance.



A high priority has been placed on implementing an effective EMS program throughout EPA, and in particular at the Office of Research and Development (ORD). ORD's nine research facilities focus on protecting public health and the environment through the development of products designed to inform the national research agenda. These products include ongoing and emerging research, methods, models, tools, and data. To facilitate the implementation process, ORD has established teams to oversee the implementation of EMSs at each research facility. To date, members from each team have helped develop two internal training workshops and selected members have completed the registrar accreditation board's ISO 14001 lead auditors' course.

Each team tailors the EMS to meet the needs of the local facility and its one-of-a-kind research mission. For example, at a laboratory in Research Triangle

Park, NC, engineers conduct research in emissions from motor vehicles, off-road and diesel engines, and a variety of fuel additives. This research function does not exist elsewhere in the agency and presents a unique opportunity for implementing more effective fuel management processes. Although ORD's responsibilities for managing and storing fuel are smaller scale than those of other federal agencies, this function is included as one of the environmental aspects covered by the EMS.

Another important component of EPA's EMS program is devising a strategy for keeping staff engaged in their onsite EMS program. For example, the "e4e"—everyone for the environment—logo (left) was developed by the EMS team at Research Triangle Park and is placed at strategic locations throughout the facility to serve as a visual reminder for everyone to "walk the talk" (i.e., everyone has an affect on and is affected by the environment). Staff training, town-hall-style meetings, and visual reminders of the ongoing program are helping to create an agency-wide workplace culture that emphasizes reducing the environmental footprint.

So how does all of this result in better protection of the environment? In the case of ORD, through implementation of facility-wide EMSs, the office is prepared to tackle the more complex environmental stewardship issues that are integral to conducting environmental research. For more on EPA's EMS program, visit www.epa.gov/ems, where you'll find information and resources designed for business, the public, and other state and federal agencies.

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